

TECHNICAL NOTE

20

MISSILE-X PROGRAM
LOGISTIC ELEMENT MANAGEMENT PLAN
FOR
SUPPLY SUPPORT LEMS

29 August 1977

Prepared for

DEPARTMENT OF THE AIR FORCE
SPACE AND MISSILE SYSTEMS ORGANIZATION (AFSC)
ICBM Program Office

Under Contract F04606-76-A-0087-R901

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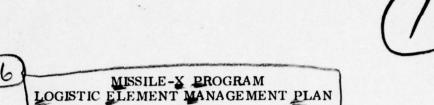
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RING RESEARCH CORPORATION

P.O. Box 1375/Santa Ana, Calif.



FOR SUPPLY SUPPORT LEMs.

29 Aug 77

9 Technical note,

One of 12 LEM Plans Prepared for

DEPARTMENT OF THE AIR FORCE SPACE AND MISSILE SYSTEMS ORGANIZATION (AFSC) ICBM Program Office

Under Contract F.04606-76-A-0087

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SPACE AND MISSILE SYSTEMS ORGANIZATION AIR FORCE SYSTEMS COMMAND

Prepared by

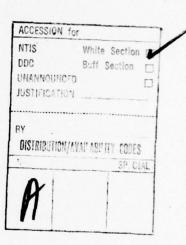
Logistics (MNL)

Deputy for Intercontinental Ballistic Missiles

MISSILE-X PROGRAM LOGISTIC ELEMENT MANAGEMENT PLAN FOR SUPPLY SUPPORT LEMS

29 August 1977





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FOREWORD

This Supply Support (SS) Logistic Element Management Plan is one of twelve plans supplementing the guidance and direction for the Integrated Logistic Support (ILS) program as delineated in the Missile-X Integrated Logistic Support Plan (ILSP). Whereas the ILSP provides general guidance and direction for integrating all logistic elements into the overall program requirements, this plan treats the specific actions, milestones, and coordination efforts of the Logistic Element Managers for Supply Support (SS-LEMs). It has been written to assist them in fulfilling their responsibilities toward achieving the ILS objectives of the MX Program.

The majority of information contained in Sections 1 through 4 herein is common to all plans. Sections 5 and 6 present information pertinent to the SS-LEMs' efforts.

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1 INTRODUCTION

1.1 BACKGROUND

In accordance with DoD Directive 4100.35, the promulgating authority of AFR 800-8, and the guidance provided by AFP 800-7, the MX Program Office has implemented an Integrated Logistic Support program for the MX Weapon System. The ILS program, as delineated in the Integrated Logistic Support Plan (ILSP), is intended to ensure that the weapon system is designed with due consideration given to its supportability and that the required support will be attained within an affordable, minimum life cycle cost.

For the MX System, logistic elements - areas of support activity that collectively comprise the management concept of ILS - have been defined. These are:

Maintainability Interface (M)

Reliability Interface (R)

Nuclear Hardness and Survivability Interface (NH&S)

Maintenance Planning (MP)

Support and Test Equipment (SE)

Supply Support (SS)

Transportation and Packaging (T&P)

Technical Data (TD)

Support Facilities (SF)

Personnel and Training (P&T)

Logistic Support Management Information (LSMI)

Logistic Support Resource Funds (LSRF)

For each area of support activity, the MX Program Office has designated a logistic element manager (LEM) responsible for managing the accomplishment of the tasks associated with his element. The element discussed in this plan has been

divided into the subelements of Preoperational and Operational Supply Support. A LEM has been assigned to each of these subelements.

2 PURPOSE

This document is a Logistic Element Management Plan for the Supply Support element. It has been written to provide each of the SS-LEMs with guidance in managing his subelement, and ensuring the integration of ILS supply support requirements into the system design process. This plan, and those developed for the other eleven logistic elements, will become supplementary documents to the ILSP.

1.3 MX PROGRAM

The MX Program has been implemented to provide the technology base for the development of an improved land-based strategic missile weapon system. Efforts are being directed toward the design, development, and deployment of an ICBM system within one of two nuclear hardened, multiple aim point (MAP) basing alternatives. The two currently favored basing options are the buried-trench and shelter-based weapon systems.

Full scale development (FSD) of the MX Weapon System is divided into two major efforts: missile development, including the missile and canister; and weapon system development, which includes the MAP basing hardware, software, and facilities, and the integration of the missile/canister with these equipments and facilities.

This Logistic Element Management Plan structures the supply support logistic requirements of the ILSP into identifiable responsibilities of each SS-LEM, and delineates the tasks associated with these responsibilities. The plan is applicable to the FSD phase of the MX Weapon System, with overlap to the preceding validation and system definition phases and succeeding production/deployment phases. The plan applies to all elements of the weapon system, including the air vehicle, support functions, and the selected basing option. In addition, this plan:

- a. Provides an overview of the MX program management concept, and the LEMs' position in the management structure.
- b. Describes the ILS program and the functions of the SS-LEMs within that program.
- c. Describes the participation of the SS-LEMs in the ILS Management Information System.
- d. Indicates the interdependencies among tasks and the coordination among all members of the Integrated Logistic Support Management Team (ILSMT), the project element officers (PEOs), and systems engineering.
- e. Presents a basic schedule for the performance of tasks by relating each task to the time frame of major program events.
- f. Indicates the interrelationships of the SS-LEMs with the remaining logistic elements.

The following document listing is provided as a reference source relating to the implementation of an ILS program and the SS Interface logistic element.

DoD Directive 4100.35	Development of Integrated Logistic Support for Systems/Equipment, 1 October 1970
DoD 4100.35G	Integrated Logistic Support Planning Guide for DoD Systems and Equipment, 15 October 1968
AFR 800-8	Integrated Logistic Support (ILS) Program for Systems and Equipment, 27 July 1972
AFP 800-7	Integrated Logistic Support Implementation Guide for DoD Systems and Equipments, March 1972
AFM 67-1	USAF Supply Manual, Volume II, Part 2, 15 February 1975
AFLCR 65-5	Air Force Provisioning Policies and Procedures, 22 December 1975
MIL-STD-1538	Spare Parts and Maintenance Support of Space and Missile Systems Undergoing RDT&E, 11 April 1973
MIL-STD-1552	Uniform DoD Requirements for Provisioning Technical Documentation, 11 November 1974
MIL-STD-1561	Uniform DoD Provisioning Procedures, 11 November 1974
SAMSO Supplement to AFR 800-8	Integrated Logistic Support (ILS) Program for Systems and Equipment, 7 September 1976
ICBM PO ED 77-6	System Requirements Analysis Programs for the MX Weapon System, 24 May 1977
ILSP	Missile-X Integrated Logistic Support Plan, June 1977
PO Manual	ICBM PO Project Officers' Manual, 1 July 1976
SAMSO/MNL Publication	ILS Management Information System Report, 31 August 1977

PROGRAM MANAGEMENT

Management of the MX Weapon System Program is the responsibility of the ICBM Program Office. The Program Manager has the overall responsibility for acquisition and integration management of the program, and is supported by the following Directorates within the ICBM Program Office:

Logistics

Engineering

System Acquisition Management Support

Procurement and Production

Deployment

Program Control

The ICBM Program Office comprises a team of Air Force and contractor personnel. That office operates with a functionally decentralized organizational structure, which has resulted in the implementation of the Project Element Management System. In this system, the program is divided into a series of discrete, functional elements, each managed as an entity by a designated project element officer responsible for monitoring the technical, cost, and schedule performance of one or more MX associate contractors. No prime contractor will be designated for the MX Program. Rather, the ICBM Program Office will function as the system integrator.

4.1 ILS PROGRAM ORGANIZATION

4.1.1 Deputy Program Manager for Logistics

The Deputy Program Manager for Logistics (DPML) was assigned from HQ AFLC with the concurrence of the MX Program Manager, and serves as the focal point for MX logistics management. The DPML and his organization are an integral part of

the ICBM Program Office and form the Directorate of Logistics (MNL). Within the MX Program, it is the responsibility of the DPML to assure that:

- a. Continuous attention is given to logistic support posture and costs throughout the acquisition process.
- b. Tradeoff studies affecting system design are evaluated to determine their impact on supportability, life cycle cost, and operational requirements.
- c. All objectives of ILS are achieved for the MX Weapon System.

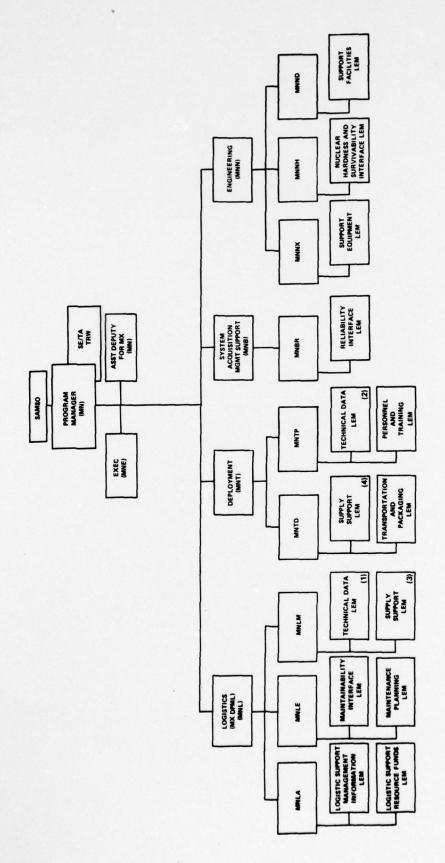
The DPML will draw upon the support of the designated logistic element managers to obtain timely contributions to those system design and support decisions which affect logistic support costs and effectiveness throughout the life of the system.

4.1.2 Logistic Element Managers

As discussed in paragraph 4, the Program Office operates with a functionally decentralized organization structure. This decentralization has positioned ILS elements (as defined by AFR 800-8) outside of the Logistics Directorate, in company with those engineering design elements (e.g., Reliability) normally external to the logistics organization. Logistic element managers have been designated within each functional logistic-related area. In addition, the Technical Data and Supply Support elements are further separated in subelements to gain maximum benefits from the decentralized organizational structure. The elements, by Directorate, are shown in Figure 4-1.

The manager for each subelement is the single point of contact for the DPML in the management of all logistic integration aspects of the assigned subelement. The LEMs assure that the tasks associated with their subelement, as defined within this Logistic Element Management Plan, are accomplished. They provide liaison and coordination among the other logistic element managers as required for the achievement of integrated logistic support. They further assure that all relevant ILS data are collected, analyzed, reported, and disseminated, as appropriate, for their element.

Each LEM also plays a key role in supporting the Program Office's function as integrating agency of all associate contractor activities. The SS-LEMs support systems engineering and the PEOs by providing the management assistance needed to identify the contractual requirements relative to their subelements. In so doing.



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Figure 4-1. MX Program Logistic Element Managers

SUBELEMENTS:
(1) Engineering Data
(2) Technical Orders
(3) Operational
(4) Preoperational

they assure that a system integration approach is used in determining the requirements for each associate contractor. Due to the large number of associates involved, a significant coordination effort will be required by each LEM within his logistic subelement to maintain cognizance of the activities that impact on logistics.

Each LEM is a member of the Integrated Logistic Support Management Team, and through active participation as a team member he supports the DPML in managing the accomplishment of the Program Office's acquisition logistics tasks.

It is through the exchange of information at ILSMT meetings and the interrelationships of LEMs that the DPML will acquire the program information necessary to assure the integration of logistic support elements into the total program requirements.

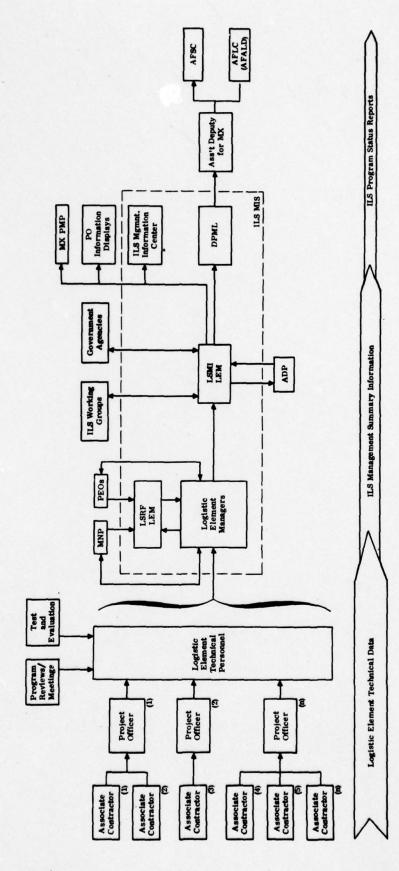
4.2 ILS MANAGEMENT INFORMATION SYSTEM

The ILS Management Information System was developed to assist the DPML and all logistic element managers in their efforts to achieve the logistic objectives of the MX Weapon System. Management and direction of the information system's activities are the responsibility of the DPML. This responsibility is discharged primarily through his position as chairman of the ILSMT and of technical interchange meetings.

Successful implementation of the ILS MIS depends on each LEM's accomplishment of the tasks delineated in his LEM plan, through fulfilling his reporting responsibilities, and through active participation in the ILSMT.

The ILS Management Information System Report dated 31 August 1977 provides a complete description of the ILS MIS and the LEMs' role in implementing the system. Figure 4-2 depicts the information flow of the ILS MIS, and will serve as an aid in understanding the data input/output and coordination activities of the SS-LEMs as defined in Sections 5 and 6 of this plan.

In general, much of the management information will involve estimates, or other planning data in which the quality of the data used will vary over some acceptable range. The criteria provided for use by the LEMs in describing the relative quality of MIS data are presented in tables within the Integrated Logistic Support Management Information System Report. Assistance to the LEMs for participating in the ILS MIS, as both contributor and user, will be provided by the Logistic Support Management Information LEM.



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Figure 4-2. Information Flow of the ILS MIS

A typical schedule showing program events for the logistic subelements addressed in this plan is shown in Appendix C. This schedule depicts the general type of information required as input to the management information system for tracking the progress of each associate contractor in fulfilling the requirements for a specific logistic element. This type of information is also a prerequisite to the LEMs' efforts of tailoring the task schedule shown in Tables 6-1a and 6-1b to each associate contractor's unique development activities.

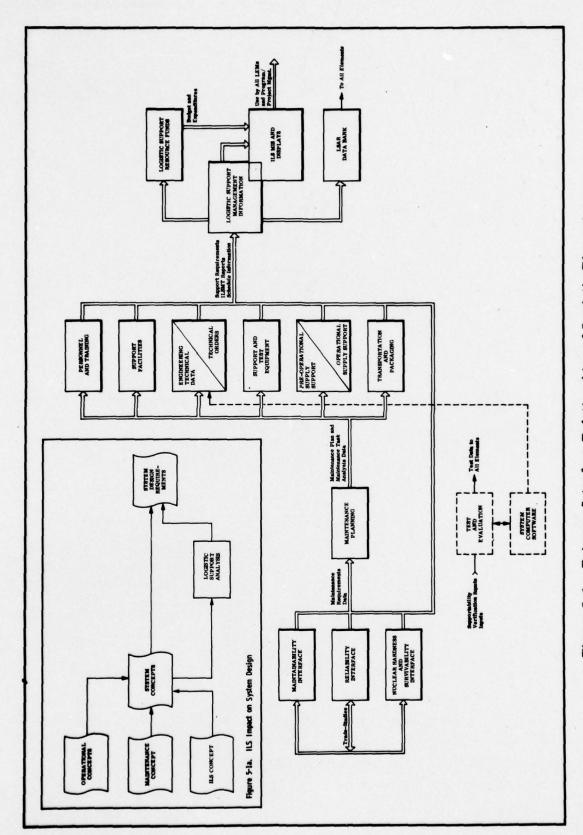
5.1 INTEGRATED LOGISTIC SUPPORT PROGRAM

Integrated Logistic Support is a concept that encompasses the total and timely support of a system/equipment, within acceptable life cycle cost criteria, for the duration of its useful life. Realization of this concept is achieved through planning and analysis tasks for the subsequent procurement of all required support as part of the total acquisition process.

An ILS program has been implemented for the MX Weapon System to assure that the ILS concept impacts the system design process in a manner that will improve supportability and control O&S costs. Within the ILS program, logistic elements have been identified (see paragraph 1.1). These elements are areas of support activity which, when collectively considered, provide the basis for the acquisition of the human, material, and financial resources required to maintain a system in an acceptable state of operational readiness within affordable cost criteria.

Essentials of the ILS program include the analysis and definition of quantitative and qualitative logistic support requirements; the prediction of logistic support costs; and the performance of tradeoff studies and evaluations. The responsibility for performance of these efforts rests with the ICBM Program Office and its supporting directorates. However, the responsibility for monitoring and assuring the accomplishment of these efforts has been assigned to the logistic element managers. Each Logistic Element Management Plan delineates the detailed areas of responsibility for a specific LEM.

Figure 5-1 depicts the information flow among the various LEMs during the performance of their ILS efforts. While the information flow will primarily be in the direction indicated by the arrows in that diagram, situations will arise where information must be passed in both directions. Additionally, the information flow might be influenced by variations in logistic information requirements among the configuration end items. Figure 5-1a (inset in Figure 5-1) indicates that the impact of the ILS concept on the system design is achieved through the logistic support analysis efforts.



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Figure 5-1. Primary Interface Relationships of Logistic Elements

5.2 SUPPLY SUPPORT LOGISTIC ELEMENT

The supportability of the MX Weapon System is dependent upon the adequacy of the preoperational and operational supply support efforts. These efforts must be implemented to assure the timely provisioning, distribution, and inventory replenishment of spares, repair parts, consumables, and special supplies. The logistic support analysis (LSA) provides a primary data source with respect to system/equipment utilization rates, operating hours, failure rates, field repair rates, maintenance locations, and maintenance items critical to safety and mission accomplishment. These data must be analyzed and translated into supply support requirements for each item of the system/equipment subject to provisioning actions.

As a logistic element, Supply Support encompasses those activities involved in assuring that the element's impact on ILS is identified, evaluated, and documented. This information is then utilized in the design tradeoff process in obtaining a balance between supportability and system costs. A number of tasks will be implemented by the PSS- and OSS-LEMs to ensure that supply support criteria are utilized in the ILS process and to track the progress of the Supply Support element. These LEMs will develop schedules of their assurance tasks for each applicable associate contractor involved in FSD.

Primary interface relationships of the PSS subelement are with the Reliability, Maintenance Planning, Personnel and Training, and Test and Evaluation elements. Relationships of the OSS subelement are with Personnel and Training and Test and Evaluation. Secondary relationships between the PSS and OSS subelements and other elements will occur to the extent that compatibility must exist between supply support and the ILS process.

In performing their assurance functions, the PSS- and OSS-LEMs will coordinate as required with PEOs, OPRs, Deployment Division and Logistics Division personnel, and other LEMs. Additionally, in areas such as test and evaluation and software support that do not have LEM representation, coordination may be required with POs. The SS-LEMs' membership in the ILSMT will require the preparation of status reports, initiation of problem/impact statements, development of schedule information for the MIS, and resolution of assigned action items.

6.1 RESPONSIBILITIES

The Supply Support LEMs assist the Deputy Program Manager for Logistics in assuring that the supply support aspects of the ILS program are achieved, and that supply support is made an integral part of the system/equipment design process.

6.1.1 Preoperational Supply Support (PSS)

Responsibilities of the PSS-LEM include:

- a. Coordinating the Preoperational Supply Support subelement of logistics for the MX Program
- b. Serving as the point of contact for MX logistic support analysis activities concerning preoperational supply support
- c. Establishing lines of communication with each PEO, and providing assistance in all matters pertaining to preoperational supply support
- d. Providing preoperational supply support data inputs to the ILS Management Information System
- e. Acting as the preoperational supply support representative to the ILSMT.

6.1.2 Operational Supply Support (OSS)

Responsibilities of the OSS-LEM are:

- a. Coordinating the Operational Supply Support subelement of logistics for the MX Program
- b. Serving as the point of contact for MX logistic support analysis activities concerning operational supply support
- c. Establishing lines of communication with each PEO, and providing assistance in all matters pertaining to operational supply support
- d. Providing operational supply support data inputs to the ILS Management Information System

- e. Ensuring that criteria are developed concerning the cost effectiveness of the operational supply support concepts
- f. Acting as the operational supply support representative to the ILSMT.

6.2 MANAGEMENT TASKS

The scope of each task identified in this plan must be tailored by the SS-LEMs for each specific procurement. Consequently, the applicable data items and the degree of coordination activities will vary with the scope of the task. As will be seen, there is considerable similarity between the PSS- and OSS-LEMs' tasks.

While the tasks identified herein are intended to be comprehensive relative to the scope of the SS-LEMs' responsibilities, additional tasks may become apparent during the implementation of this plan. The LEMs are responsible for assuring that these new tasks are planned and scheduled for each applicable procurement. The new tasks should be documented, this plan updated as applicable, and the appropriate information provided to the LSMI-LEM for updating the MIS and its information displays.

Described below are the tasks to be performed. Tables 6-1a and b (see paragraph 6.3) present task summaries, applicable data items, expected coordination required for the tasks, and a schedule relating tasks to major program events.

6.2.1 Preoperational Supply Support Tasks

The following tasks are associated with the Preoperational Supply Support subelement.

• Task 1

Assure that preoperational supply support criteria are developed for each configuration end item (CEI) procurement. This task is performed prior to RFP release by a review of the AFSC form 40s by Deployment Division personnel. These forms are reviewed to determine that the necessary data item descriptions (DIDs) have been modified/developed to fit each hardware procurement. The PSS-LEM coordinates with each PEO and the applicable deployment POs to establish that the AFSC form 40s have been developed, that preoperational supply support requirements have been

identified, and that the statement of work (SOW) for each CEI reflects these requirements. The PSS-LEM may inspect these documents to verify that the necessary information has been provided.

• Task 2

Assure that ECI proposals are evaluated for their approach to planning for preoperational supply support. The PSS-LEM coordinates with each PEO, Deployment
Division personnel, and applicable logistic support engineering and management
personnel to determine that review criteria have been prepared for proposal evaluations with respect to preoperational supply support; that each contractor's proposal
addresses this subelement in accordance with the SOW; and that the degree of compliance for this subelement with the SOW has been established. The PSS-LEM may
provide inputs to the proposal evaluation criteria, and review the results of the evaluation effort to verify the application of the criteria.

• Task 3

Assure that Air Force and contractor developed documentation concerning preoperational supply support are reviewed/evaluated/approved. The PSS-LEM verifies that contractor developed preoperational supply support plans are reviewed/approved; that the results of design and tradeoff studies utilized in developing spares and repair parts for preoperational supply support are reviewed/approved; that LSA records are reviewed for information associated with preoperational supply support; and that the results of design reviews and audits are evaluated for their impact on preoperational supply support. Additionally, he will ensure that contractor generated lists/reports associated with preoperational supply support are reviewed/evaluated/approved; and that preoperational supply support for Government furnished equipment (GFE) is planned and implemented. In implementing these assurance functions the PSS-LEM coordinates with each PEO, Deployment Division personnel, systems engineering, other LEMs and applicable logistic POs. The PSS-LEM may select certain documentation for review to verify their adequacy.

• Task 4

Assure that transition to Government support is planned/implemented. The PSS-LEM coordinates with each PEO, the R-LEM, the OSS-LEM, the MP-LEM, systems engineering, and appropriate logistic personnel in ensuring that

preoperational supply support criteria are applied to the parts, materials, and process selection control program. He coordinates with each PEO, the OSS-LEM, and Deployment Division personnel in verifying that a resident provisioning team is established and that a joint use program for preoperational spares and repair parts is implemented.

• Task 5

Assure that spares, repair parts, and special supplies are provided/procured for preoperational testing, training and deployment. In performing this task the PSS-LEM tracks the delivery schedules for the preoperational supply support items to ensure their availability for testing, training, and deployment. The PSS-LEM coordinates with each PEO, the T&E PO, Deployment Division personnel, Logistics Division personnel, and the P&T-LEM in implementing this assurance function.

• Task 6

Assure that CEI contractors adhere to storage and inventory control requirements for preoperational spares and repair parts. A significant aspect of supply support is the provisioning of spares and repair parts that have not been degraded by nonoperational physical and environmental conditions. Storage and inventory control requirements are established to minimize the possibilities of any degradation. Through close coordination with each PEO, Deployment Division personnel, and the OSS-LEM, the PSS-LEM verifies that these requirements have been established and that the contractors for each CEI are adhering to these requirements. The PSS-LEM may inspect selected documentation to ensure compliance with these requirements.

• Task 7

Support the preparation/updating of logistic documentation. The PSS-LEM reviews/develops/updates information contained in or to be a part of MX program documents. The DPML will provide guidance for performing this task. Documents developed by the Logistics Directorate as well as by other program organizations will be reviewed for relevant logistic information. The PSS-LEM will prepare the preoperational supply support inputs for each appropriate document. Coordination will be required with Deployment Division personnel, the OPR for each document, and other LEMs as appropriate, for providing the required logistic information.

• Task 8

Assure that engineering change proposals and requests for deviations/waivers are evaluated for their potential impact on preoperational supply support. ECPs are utilized to make design changes once a baseline design has been identified.

Deviations/waivers usually reflect a situation where one or more design requirements cannot be achieved. In both situations, evaluations must be accomplished to identify the effects either item may have on preoperational supply support requirements. The PSS-LEM verifies that the necessary reviews and analyses have been performed and that actual and potential impacts on PSS have been determined. The PSS-LEM coordinates with each PEO, systems engineering, Deployment Division personnel, and other LEMs as necessary, in performing this assurance task. Some documentation review may be required to verify that the appropriate analyses have been performed.

6.2.2 Operational Supply Support Tasks

The tasks outlined below are performed by the Operational Supply Support subelement. All CEIs may not require operational supply support in that equipment procured as part of the full scale development program may not be operationally deployed. These tasks must be reviewed for each CEI and applied where appropriate.

• Task 1

Assure that operational supply support criteria are developed for each CEI procurement. Each CEI is evaluated for its potential operational deployment. For those items expected to be used operationally, AFSC form 40s must be reviewed by Logistics Directorate personnel to determine that the required DIDs have been modified/developed to fit each hardware procurement. The OSS-LEM coordinates with each PEO and the applicable logistic POs to verify that form 40s have been prepared, that operational supply support requirements have been determined, and that the SOW reflects these requirements. The OSS-LEM may choose to inspect these documents to verify the inclusion of the required information.

• Task 2

Assure that CEI proposals are evaluated for their approach to planning for operational supply support. The OSS-LEM coordinates with each PEO and Logistics Directorate personnel to verify that review criteria have been developed for proposal

evaluation, that each proposal addresses this subelement as identified in the SOW, and that the degree of compliance with the SOW for this subelement has been determined. The OSS-LEM may assist in developing proposal evaluation criteria as well as review the results of the proposal evaluation with respect to this subelement.

• Task 3

Assure that Air Force and contractor developed documentation concerning operational supply support are reviewed/evaluated/approved. In performing this assurance function, the OSS-LEM ensures that operational supply support plans are reviewed/approved; that design and tradeoff study results used for determining operational spares and repair parts quantities are reviewed/approved; that design review and audit results are evaluated for operational supply support impact; that LSA records are reviewed for operational supply support information; and that contractor generated operational supply support lists/reports are reviewed/evaluated/approved. He will ensure that operational supply support for GFE is planned/implemented, and that operational provisioning documentation is developed/reviewed/approved. The OSS-LEM coordinates with each PEO and appropriate Logistic Directorate personnel. The OSS-LEM may initiate reviews to verify the adequacy of this documentation.

• Task 4

Assist in assuring the transition to Government support. Through close liaison, the OSS-LEM aids the PSS-LEM in implementing this task. Primary areas of interest include the parts, materials, and process selection control program; the establishment of a resident provisioning team; and the program for joint use of preoperational spare and repair parts.

• Task 5

Assure that spares, repair parts, and special supplies are provided/procured for operational testing and training. The OSS-LEM coordinates with each PEO, Deployment Division personnel, Logistics Division personnel, the T&E PO, and the P&T-LEM to ensure that the required supply support items are available for operational testing and training. In performing this task he will monitor the delivery schedule for these items to verify their availability for operational testing and training activities.

• Task 6

Assure that the suitability of spares, repair parts, and supplies for operational support is verified by tests and demonstrations. Testing and training efforts will provide the basic information required to determine the adequacy of supply support items. The OSS-LEM coordinates with each PEO, Deployment Division personnel, the T&E PO, the PSS-LEM, and the P&T-LEM in verifying that tests and demonstrations have been performed, results analyzed, and problems corrected. The LEM may review/inspect data or documents to ensure that suitability has been demonstrated.

• Task 7

Support the preparation and updating of logistic documentation. The implementation of this task is similar to Task 7 listed under paragraph 6.2.1, except the output would be associated with operational supply support.

• Task 8

Assure that ECPs and requests for deviations/waivers are evaluated for their potential impact on operational supply support. This task is similar to Task 8 presented in paragraph 6.2.1, and would be implemented in a like manner except that the efforts would be directed toward operational supply support.

6.3 PREFACE TO TASK TABLE

Tables 6-1a and 6-1b list the tasks discussed in Sections 6.2.1 and 6.2.2, respectively, together with the corresponding data items and coordination required in the performance of the tasks. The schedules shown in these tables indicate the availability dates of data items relative to major program milestones. The PSS- and OSS-LEMs will prepare schedules for the completion of the tasks applicable to each hardware end item, using contract award dates as the basis for assigning calendar dates to each schedule.

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Tasks	Applicable Data Items	Coordination	RFP Release	Contract Award	SD.R	PDR	CDR	FCA	TRE	Production Release
1. Assure that preoperational supply support criteria are developed for each configuration end item (CEI) procurement.	1. AFSC form 40s	Deployment POs, each PEO	\							
2. Assure that ECI proposals are evaluated for their approach to planning for preoperational supply support.	Contractor proposals SoW tasks Sow criteria	Deployment POs, logistic POs, each PEO		◁						
3. Assure that Air Force and contractor developed documentation concerning preoperational supply support is reviewed evaluated approved, Subtasks include:				CA ₉	g					
a. Assure that contractor developed preoperational supply support plans are reviewed/approved.	1. Production Plan (P-3460/M) 2. Critical Rem Control Plan 3. ISP (L-6138)	Deployment POs, applicable LEMs, logistic POs, each PEO		As and As	No. Case September 1	Update as required	ired			
b. Assure that the results of design and tradeoil studies utilized in developing quantities of spares and repair parts for preoperational supply support are support and supply su	1. Producibility studies (S-3606/M) 2. Design analysis reports (S-3581)	Deployment POs, logistic POs, each PEO, systems engineering			390	30D PDR 30	300 CDR			
c. Assure that LSA records are reviewed for informa- tion pertaining to pre- operational supply support.	1. ORLA (R-3549) 2. LSAR (S-6171A)	Deployment POs. logistic POs, each PEO, applicable LEMs			150 PDR	JR 10D	15D CDR CDR	CDR 60D		
d, Assure that the results of design reviews and audits are evaluated for their impact on preoperational supply support.	Design review minutes (E-3118) Fallure summary reports (R-3537A/M)	Deployment POs, each PEO, R., M., and MP-LEMs			4		Monthly		11	

Production Release FCA 30D CDR (SP 30D) As directed As directed Update as necessary CDR Update as required Milestone Schedule PDR TABLE 6-1a. PREOPERATIONAL SUPPLY SUPPORT TASKS (Sheet 2 of 3) SDR CA 30D CA 300 Contract Release Deltial Deltial Deployment POs. systems engineering. R-, TD-, and OSS-LEMs, each PEO Systems engineering, each PEO, SE-LEM, Deployment POs Deployment POs, R-LEM, each PEO Coordination Deployment POs Deployment POs 1. Contractor selected parts.)
materials, and processes 1. Contractor selected parts, materials and processes list 3. Program preferred list candidate info. 1. GFE screening criteria Applicable Data Items 2. Parts, materials and processes application data 2. Parts specifications 4. Parts specifications 5. Nonpreferred part approval request 2. GFE lists f. Assure that preopera-tional supply support for Government furnished equipment (GFE) is planned and implemented. e. Assure that contractor generated lists/ reports associated with preoperational supply support are reviewed/ evaluated/approved. 4. Assure that transition to Government support is planned/implemented. Subtasks to be performed are: c. Ensure that a joint use program for preopera-tional spares and repair parts is established. a. Ensure that preopera-tional supply support criteria are applied to the parts, materials, and process selection and control program. b. Ensure that a resident provisioning team is established. Tasks 3. (Continued)

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TABLE 6-18. PREOPERATIONAL SUPPLY SUPPORT TASKS (Shaeft 3 of 3)

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Tasks Applicable Data Rams Coordination Repare Correlation Polyments Polyments are prevented unanch sparres (L-7021/M) 1. Assure that CEI confractors are adversaries and prevented control requires investage request (E-7022/M) 2. Assure that CEI confractors are adversaries and repair parts. materials and sparres and repair parts. 3. The properational regions are depair parts. 3. The properational apple and repair parts. 4. Relating and repair parts. 5. Analogous the production of properational apple and repair parts. 5. Analogous the formation of reports (E-1222/M) 5. Analogous the formation of reports (E-1222/M) 6. Assure that ECPs and repair parts. 7. Support the confession of repair parts. 8. Assure that ECPs and repair parts. 9. THE POLY TELES P			Milestor			Milk	Milestone Schedule	ile			Γ
1. Consumption/usage reports (L-702.1/M) 2. Critical to launch sparce reports (L-702.1/M) 3. Parts, materials and processes application datas 4. Residual asset report (L-702.1/M) 1. Service Ille prediction models (S-3581/M) 2. Operational aging and aurenillance report (L-702.1/M) 2. Maintenance concept (PEC, OSS-LEM asset report (L-702.1/M) 3. ITP 4. SS-LEM Plan 5. Deployment POs, each geometry Pos, applicable LEMs 5. Try 6. SS-LEM Plan 7. Service (E-3128/M) 8. Str. Coperations/waiver applicable LEMs 7. Service (E-3128/M) 8. Str. Coperations/waiver applicable LEMs 8. Service (E-3128/M) 8. Str. Coperations/waiver applicable LEMs 8. Str. Coperations/waiver applica	Tasks	Applicable Data Items	Coordination	RFP Release	Contract Award	SOR <	PDR	CDR	FCA	TGE	Production Release
2. Critical to launch sparce reports 3. Parts, materials and data 4. Residual asset report (L-1022/M) 1. Service lile prediction models (8-381/M) 2. Operational aging aurveillance report (A-1022/M) 2. Maintenance concept (A-1022/M) 3. ITSP 4. SS-LEM Plan 1. ECPs (E-3128/M) each PEO, GS-LEM applicable LE Ms 5. Deployment POs, each peo, OPE for each counsent, applicable LE Ms 6. SS-LEM Plan 7. SS-LEM Plan 7. SS-LEM Plan 8. SS-LEM Plan 7. SS-LEM Plan 8. SS-LEM Plan 8. SS-LEM Plan 9. Deployment POs, each peo, one of applicable LE Ms 9. SS-LEM Plan 9. SS-LEM	5. Assure that spares, repair parts, and special supplies	1. Consumption/usage reports (L-7021/M)			CA 90D	-	- One	Quarterly			
3. Parts, materials and data data data data data data data	are provided/procured for preoperational testing, training, and deployment.	2. Critical to launch spares reports	Deployment POs. each PEO, T&E PO, P&T-LEM, logistic POs							30D prior to launch	r to law
4. Residual asset report (L-7022/M) 1. Service life prediction and models (S-3531/M) 2. Operational aging and surveillance report 1. ILSP 4. SS-LEM Plan 1. ECPa (E-3128/M) applicable LEMs request (E-3129/M) systems engineering		3. Parts, materials and processes application data						As d	As directed	1	
1. ILSP 2. Operational aging and surveillance report 3. ILSP 4. SS-LEM Plan 1. ECPs (E-3128/M) 2. Deviations/waiver request (E-3129/M) 3. ITP 5. Transance concept applicable LEMs 5. Transance concept applicable LEMs 6. Se-LEM Plan 7. Deviations/waiver applicable LEMs, systems engineering		4. Residual asset report (L-7022/M)	Derloyment POs, each PEO					30D CDR		1	
2. Maintenance concept 3. ITP 4. SS-LEM Plan 1. ECPa (E-3128/M) 2. Deviations/waiver request (E-3129/M) 3. Systems engineering 5. Maintenance concept applicable LEMs 5. Series (E-3128/M) 5. Series (E-3129/M) 5. Series (Assure that CEI contractors are adhering to storage and inventory control require- ments for preoperational spares and repair parts.		Deployment POs, each PEO, OSS-LEM					CA 600		1 1	
requests for deviations/ requests for deviations/ waivers are evaluated for request (B-3129/M) preoperational supply support.	. Support the preparation/ update of logistic documentation.	1. ILSP 2. Maintenance concept 3. ITP 4. SS-LEM Plan	Deployment POs, OPR for each document, applicable LEMs				As required				
	Assure that ECPs and requests for deviations/waivers are evaluated for their potential impact on preoperational supply support.	1. ECPs (E-3128/M) 2. Deviations/waiver request (E-3129/M)	Deployment POs, each PEO, applicable LEMs, systems engineering					As required	luired	1	

30D CDR (SP 30D) As directed Update as required Update as necessary Milestone Schedule TABLE 6-1b. OPERATIONAL SUPPLY SUPPORT TASKS (Sheet 2 of 3) \$ d CA 30D Contract RFP Release Logistic POs, systems engineering, R-, TD-, and PSS-LEMs, each PEO Logistic POs, each PEO, TD-LEM Logistic POs, R-LEM, each PEO Systems engineering, each PEO, SE-LEM, logistic POs Logistic POs, each PEO Coordination Contractor selected parts, materials and processes list 1. Contractor selected parts, materials and processes list 2. Parts, materials and processes application data 2. Critical to launch spares 1. CFE screening criteria 3. Program preferred list candidate info. 4. Residual Asset Report (L-7022/M) Applicable Data Items 3. Parts, materials and processes application data 4. Parts specifications 2. Parts specifications 1. Consumption/usage reports 5. Nonpreferred part approval request 2. GFE lists e. Assure that contractor generated lists/reports associated with opera-tional supply support are reviewed/evaluated/ approved. g. Assure that provisioning documentation for the operational phase is developed reviewed/approved. a. Assure that operational supply support criteria are applied to the parta, and process selection and control program. f. Assure that operational supply support for Government furnished equipment is planned and implemented. Assist in assuring the transition to Government support. Applicable tasks include: Tasks 3. (Continued)

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TABLE 6-1b. OPERATIONAL SUPPLY SUPPORT TASKS (Sheet 3 of 3)

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					Salina Salina	Olle School				T
Tasks	Applicable Data Items	Coordination	RFP Release	Contract	SDR	PDR	CDR	FCA	TAE	Production Release
4. (Continued)				•			•	• *	•	-
b. Support the establishment of a resident provisioning team.		Logistic POs, PSS-LEM						1] .	•
c. Support the establishment of a joint use program for preoperational spares and repair parts.		Logistic POs, PSS-LEM		CA 90D						+
5. Assure that spares, repair parts and special supplies	1. Consumption/usage reports (L-7021/M)			4			Quarterly		A 200	
are provided procured for operational testing and training.	2. Critical to launch spares reports	Logistic POs, each PEO, T&E PO, P&T-, PSS-LEMs							on Lord Cine	•
	3. Parts, materials and processes application data			◁			As directed	est		+
6. Assure that the suitability of spares, repair parts and supplies for operational support is verified by tests and demonstrations.	1. Detailed test plans (T-3707/M) 2. Test reports (T-3718/M)	Logistic POs, each PEO, Tare PO, PSS-LEM					4	Test 30D		+ +
7. Support the preparation update of logistic documentation.	I. II.SP Maintenance concept ITP SS-LEM Plan	Logistic POs. OPR for each document, applicable LEMs			AS	As required				+
8. Assure that ECPs and requests for deviations/ waters are evaluated for their potential impact on operational supply support.	1. ECPs (E-3128/M) 2. Deviations/waiver request (E-3129/M)	Logistic POs, each PEO, applicable LEMs, systems engineering			4		As required	ired		+

APPENDIXES

Appendix A:	Missile-X Program Logistic Element Manager Director	.у.	•	•	٠	A-1
Appendix B:	Acronyms and Abbreviations			•	•	B-1
Appendix C:	Logistic Element Schedule for Supply Support		•			C-1

A PPENDIX A

M LOGISTIC EL Co	MISSILE-X PROGRAM ELEMENT MANAGER DIRECTORY Col. L. E. Eklund, DPML			
Logistic Element	Manager	Code	Ext.	Room
Reliability Interface	Capt. T.M. Palmer	MNBR	5359	421
Maintainability Interface	Capt. A.D. Wadsworth	MNLE	4523	619
Nuclear Hardness and Survivability Interface	Capt. W.R. Jacobs	MINIM	7843	111
Maintenance Planning	Lt. Col. R.W. Ayars	MNLE	4523	619
Support Equipment	Lt. Col. B.W. Woolverton	MINIM	7005	138
Supply Support (Preoperational)	Mr. F.C. O'Connor	MNTD	6481	009
Supply Support (Operational)	Mr. J.A. Davidson	MINIM	5321	621
Transportation and Packaging	Mr. R.W. Riggs	MNTD	5474	009
Technical Data (Engineering)	Mr. L.E. Onstott	MNLM	5321	621
Technical Data (Technical Orders)	Maj. L. W. Cooper	MNTP	6684	609
Support Facilities	Mr. F. E. Longan	MNND	6891	408
Personnel and Training	Maj. L.W. Cooper	MNTP	6684	609
Logistic Support Resource Funds	Capt. H. B. Robbins	MNLA	5395	623
Logistic Support Management Information	Mr. J.L. Peterson	MINITA	5386	623

APPENDIX B ACRONYMS AND ABBREVIATIONS

A&CO - Assembly and Checkout

ADP - Automatic Data Processing

AFALD - Air Force Acquisition Logistics Division

AFLC - Air Force Logistics Command

AFSC - Air Force Systems Command

AFTEC - Air Force Test and Evaluation Center

BTWS - Buried Trench Weapon System

C/A - Contract Award

CDR - Critical Design Review

CDRL - Contract Data Requirements List

CDRS - Contract Data Requirements Substantiation

CDSR - Cost Data Summary Report

CEI - Configuration End Item

CFSR - Contract Funds Status Report

CPR - Cost Performance Report

DPML - Deputy Program Manager for Logistics

DT&E - Development Test and Evaluation

FCA - Functional Configuration Audit

FCHR - Functional Cost Hour Report

FMA - Failure Mode Analysis

FSD - Full Scale Development

ICBM - Intercontinental Ballistic Missile

IOT&E - Initial Operational Test and Evaluation

ILS - Integrated Logistic Support

ILSMT - Integrated Logistic Support Management Team

ILSP - Integrated Logistic Support Plan

ISP - Integrated Support Plan

ITP - Integrated Test Plan

LEM - Logistic Element Manager

LSA - Logistic Support Analysis

LSAR - Logistic Support Analysis Record

MDR - Missile Design Review

MIC - Management Information Center

MIS - Management Information System

MPP - Maintainability Program Plan

MTBF - Mean Time Between Failures

MTTR - Mean Time to Repair

MX - Missile-X

OPR - Office of Primary Responsibility

OT&E - Operational Test and Evaluation

PCA - Physical Configuration Audit

PDR - Preliminary Design Review

PEO - Project Element Officer

PMP - Program Management Plan

PO - Project Officer

RPP - Reliability Program Plan

SAMSO - Space and Missile Systems Organization

SBWS - Shelter Based Weapon System

SDR - System Design Review

SOW - Statement of Work

SRA - System Requirements Analysis

T&E - Test and Evaluation

TI - Technical Interchange

TPA - Test Planning Analysis

APPENDIX C SUPPLY SUPPORT ELEMENT SCHEDULE

System Definition System Definition C/A MDR SDR PDR CDR FCA Tests A Spare parts and maintenance support A Spare parts and maintenance support A Spare parts and maintenance support Initial Updates Initial Updates MAPT 6		Voltal	, meion							Г
C/A MDR SDR PDR CDR FCA Tests AReview Assure parts and maintenance support A Spare parts and maintenance support		System I	Definition		Full Scale Do	evelopmer	ıt		Production/Deployment	
Review Spare parts and maintenance support (Quarterly) ——LSA data reviews ——LSA data reviews ——LSA data reviews ——LSA data reviews ———————————————————————————————————	m Milestones	c′A △		sor \	PDR △	CDR □	FCA	Flight Tests	IOC AAP Tests	
A Spare parts and maintenance support A (Quarterly) A A data reviews A A A A Data reviews A A A A Data reviews A A A A A A A A A A A A A A A A A A A	1. Integrated Support Plan	₽		Review						
rt ——LSA data reviews ——LSA data reviews ——LSA data reviews ——LSA data reviews ———————————————————————————————————	Contractor Support IAW MIL-STD-1538			△ Spare parts	and maintena	oddns əou	¥		4	
\(\triangle \text{(Quarterly)}\) \(\triangle \text{LSA data reviews} \) \(\triangle \text{Ditital} \text{Updates} \) \(\triangle \text{Lnitial} \text{Updates} \) \(\triangle \text{Lnitial} \text{Dpdates} \) \(\triangle \text{Lntital} \text{PpT f} \) \(\triangle \text{RpT f} \) \(\triangle \text{Dmation} \text{PpT f} \) \(\triangle \text{PpT f} \text{PpT f} \) \(\triangle \text{PpT f} \text{PpT f} \text{PpT f} \) \(\triangle \text{PpT f} \text{PpT f} \text{PpT f} \text{PpT f} \) \(\triangle \text{PpT f} \te	Critical to Launch Spares Reports							7	days before launch	
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